

Coastal Impact Assistance Program (CIAP)
Required Information and Evaluation Criteria for Projects Nominated for CIAP
Funding

Information required for all CIAP project nomination submittals:

1. Project Title: Diversion at Romeville/Blind River
2. Entity/Individual nominating the project: Louisiana Department of Natural Resources/Whitney Thompson
3. Contact Information:
Whitney Thompson
Dept. of Natural Resources
Coastal Engineering Division
617 North 3rd St. Suite 1078
Baton Rouge, LA 70802
(225) 342-9419
Whitney.Thompson@la.gov
4. Total CIAP Funds Requested: Total Estimated First Cost: \$28,126,381
5. Parish CIAP Funds Proposed:
6. State CIAP Funds Requested:
7. Infrastructure Funds Proposed:
8. Description and Location of Project: Mississippi River siphon, near Romeville, to Blind River vicinity (See attachment)
9. Project Type: 1
10. Project Justification:

The swamp surrounding the origination of the Blind River in St. James parish is stagnant, hindering river flow. A small diversion of the Mississippi River would provide fresh water to improve approximately 2000 acres of swamp and increase the flow of the Blind River. A 1500 cubic feet per second maximum capacity siphon would be constructed in the Mississippi River near Romeville, approximately 2.5 miles upstream from Convent.

The siphon would consist of six pipes, each 72" in diameter, extracting fresh water from the river. The pipes would be placed over the Mississippi River eastern levee. A section of existing road at the toe of the levee would be excavated to facilitate the installation of the pipes. The road would be rebuilt on top of the buried pipes. The pipes would also have to cross a railroad approximately one-half of a mile to the east. Up to this point, the pipes would be buried. Beyond the railroad, the flow can be discharged into a field drainage canal where the landowner has granted preliminary approval. Approximately 1.5 miles of the channel would need to be dredged to facilitate the increased flow volume. Concrete box culverts would be installed under LA 3125 to facilitate the channel flow under the highway. Beyond the highway, the flow would be released into

the swamp, initiating sheet flow, and eventually the fresh water would flow into the Blind River.

Extensive topographic modeling will be required to evaluate the desired sheet flow effect. However, the certainty of benefits resulting from implementation of the project will not be high.

This project is linked to a regional strategy for maintaining established landscape features critical to a sustainable ecosystem structure and function, but this area is not in severe need of this large scale of a project. The area is not in critical need of conservation or restoration, and it is not a high land loss area. More cost-effective projects could be built in this area.

The actual flow of a siphon depends on the elevation of the river. Based on existing Mississippi River siphons' data, siphons only flow well a few months out of the year, when the water level is high. For a 1500 cfs capacity siphon, it is estimated that the best average flow achievable is approximately 900 cfs, yet this would not be constant. Several months out of the year, the water level will be too low for the siphon to flow at all.

Siphon intake areas must be close to the levee to prevent navigational hazards. To obtain a significant volume of sediment, the intake must be in a deeper part of the river than that close to the levee. Therefore, siphons do not discharge much sediment. The proposed siphon could provide fresh water into the swamp.

Any projects affecting Mississippi River levees will be slowed by extensive levee stability analyses as well as U.S. Army Corps of Engineers regulations.

River siphons must be regularly operated and maintained, introducing additional costs. An outfall management plan would definitely need to be generated to achieve full benefits. Yearly monitoring costs could average at about \$20,000.

11. Project cost share (Types and amounts of non-CIAP funds proposed, if any):



PROJECT LAYOUT		ROMEVILLE-BLIND RIVER DIVERSION	
STATE PROJECT NUMBER:		APPROVED BY:	
FEDERAL PROJECT NUMBER:		DATE: MAY 2006	
SHEET 1 OF 1		DESIGNED BY: WHITNEY THOMPSON	
DRAWN BY: WHITNEY THOMPSON		BT	
REV.	DATE	DESCRIPTION	

